

REMARKS

Claims 1-26 and 28 are pending. The title is herein amended. Claims 1 and 18 are amended and claim 27 is herein cancelled without prejudice. Applicants submit that the amendments do not add new material to the current Application. No amendment made is related to the statutory requirements of patentability unless expressly stated herein. No amendment made is for the purpose of narrowing the scope of any claim, unless Applicants argue herein that such amendment is made to distinguish over a particular reference or combination of references.

The Examiner objected to the title stating that it was not descriptive. Applicants disagree. Regardless, Applicants herein amend the title to be more specific by adding the phrase "in situ." If the Examiner still does not find the title descriptive, Applicants herein request further guidance from the Examiner as to an appropriate title.

Applicants herein wish to bring to the Examiner's attention that the Information Disclosure Statement (substitute form for 1449A/PTO) that was mailed on May 9, 2003 was not initialed and returned with the Office Action. Applicants request that the Examiner return the form with the next Office Action so that Applicants are assured the Examiner considered the prior art that Applicants submitted to comply with the duty of disclosure (37 CFR 1.56). Applicants thank the Examiner in advance.

In addition, Applicants wish to point out that on the PTOL-326 form that was attached to the last Office Action either the box a or b was inadvertently not marked with respect to item 10 in regards to the drawings filed on 13 December 2003. Please also recognize that the date 13 December 2003 was entered but that this date is incorrect. Applicants assume that the Examiner meant "13 December 2001", not 2003 as 2001 is the date the drawings were filed. In addition, Applicants presume that the drawings are accepted as there is no mention in the Office Action itself regarding an objection to the drawings. Appropriate correction is requested.

Applicants respectfully submit that claims 1-28 are patentable over Maris (U.S. 5,748,318) in view of Lin (U.S. 6,071,177) under 35 U.S.C. 103(a) because the combination fails to teach or suggest all features of (amended) independent claims 1 and 18. With respect to claim 1 (and its dependencies), Maris and Lin, alone or together, fail to teach or suggest measuring a required feature of an inspected layer from the backside of an underlying substrate during a polishing process. Maris only teaches or suggests measuring qualities of a top layer by applying lasers to the top layer. Likewise, Lin only teaches measuring the end point of a top layer by applying lasers to the top layer. Neither Maris nor Lin, alone or together, teach or suggest projecting a pump laser pulse on a pump area of the backside of the substrate; absorbing energy of the pump laser pulse on the backside of the substrate and projecting a probe laser beam on a probe area of the backside of the substrate while in situ measuring during a polishing process.

Furthermore, Maris and Lin fail to teach or suggest measuring a required feature of an inspected layer from the backside of an underlying substrate because Maris and Lin only teach applying lasers to the top surface of an object. There is no suggestion to measure a top layer by applying lasers to the backside of an underlying substrate. In addition, applying lasers to the backside of the substrate would destroy the functionality of Lin. In Lin the lasers are within the polishing platen and therefore hit the top of the wafer first, not the backside of any substrate. When polishing, the polishing pad is in contact with the top surface of the wafer and the backside of an underlying substrate is opposite the top surface. For at least these reasons, Maris and Lin, together or alone, fail to teach or suggest all the features of claim 1 and its dependencies 2-17.

With respect to claim 18 (and its dependencies), Applicants submit that Maris and Lin fail to teach or suggest light guiding means for guiding a laser beam or pulse through a window in a polish platen. Maris fails to teach or suggest using Maris's measuring process in a polishing tool. Lin, however, teaches a measuring process in a polishing tool. In Lin, though, the lasers are within the polish platen and therefore no light guiding means through a window in a polish platen is necessary. Therefore, Lin, alone or together with Maris, fails to teach or suggest all features of claims 18-16 and 28.

Believing to have responded to every issue raised by the Examiner in the last communication mailed, Applicants believe the present Application is currently in a condition of allowance. Applicants earnestly solicit allowance of all pending claims. Please contact Applicant's practitioner listed below if there are any issues.

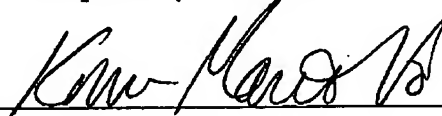
Respectfully submitted,

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